

**IN THE CLAIMS:**

1-6. (Canceled).

7. (Previously presented) A method for updating a system BIOS for a processor, comprising:

upon restart of the processor, determining whether system memory contains a BIOS package,

authenticating the BIOS package, and

upon successful authentication, storing the BIOS package in a reprogrammable BIOS memory space.

8. (Previously presented) The method of claim 7, further comprising:

determining whether the BIOS package is successfully stored in the reprogrammable BIOS memory space,

if so, report a success flag identifying the BIOS package as successfully stored.

9. (Previously presented) A computer system, comprising:

a processor,

firmware electrically connected to the processor, the firmware comprising:

a first storage space to store a first system BIOS, the first storage space being a read only memory,

a second storage space to store a second system BIOS and an index table, the index table associating elements of the second system BIOS with elements of the first system BIOS.

10. (Original) The computer system of claim 9, wherein the first storage space is to store a system BIOS and at least one ancillary BIOS and the index table identifying the BIOSes.

11-15. (Canceled).

16. (Previously presented) A BIOS processing method, comprising:

executing a system BIOS from a default memory space,

executing an ancillary BIOS according to:

determining whether an ancillary BIOS exists in an alterable memory space,

if no ancillary BIOS exists in the alterable memory space, executing an ancillary BIOS from the default memory space.

17. (Previously presented) The method of claim 16, further comprising, if an ancillary BIOS exists in the alterable section, executing the ancillary BIOS in the alterable memory space.

18. (Previously presented) The method of claim 16, further comprising, determining whether a predetermined user command has been entered and, if no predetermined user command has been entered, executing the ancillary BIOS from the alterable memory space.

19. (Previously presented) The method of claim 16, further comprising:  
decompressing an ancillary BIOS from the alterable memory space and  
executing the decompressed ancillary BIOS.

20. (Original) An ancillary BIOS processing method, comprising:  
determining whether an ancillary BIOS package is present in an enhancement space of firmware,  
if the ancillary BIOS package is present, determining whether a predetermined user command has been entered,  
if the predetermined user command has not been entered, executing the ancillary BIOS package from the enhancement space,  
otherwise, executing an ancillary BIOS from a default space of firmware.

21. (Original) The method of claim 20, further comprising:  
decompressing the ancillary BIOS from the alterable section and  
executing the decompressed ancillary BIOS.

22. (Previously presented) An ancillary BIOS processing method, comprising:  
determining whether an ancillary BIOS package is present in an enhancement space of firmware, the ancillary BIOS package including a BIOS update,  
if the ancillary BIOS package is present, determining whether a predetermined flag has been set in the firmware,  
if the predetermined flag has been set, executing the ancillary BIOS package from the enhancement space,  
otherwise, executing an ancillary BIOS from a default space of firmware.

23. (Original) The method of claim 22, further comprising:

decompressing an ancillary BIOS from the alterable section and  
executing the decompressed ancillary BIOS.

24. (Currently amended) An ancillary BIOS processing method, comprising:  
determining whether an ancillary BIOS package is present in an enhancement space of  
firmware, the ancillary BIOS package including a BIOS update,  
if the ancillary BIOS package is present in the enhancement space, decompressing the  
ancillary BIOS package, and  
executing the ancillary BIOS package, wherein decompressing comprises searching  
memory for a decompressor associated with the ancillary BIOS package and, if the  
decompressor is not found, executing a second ancillary BIOS package from a default space of  
firmware.

25. (Canceled)

26. (Currently amended) A video BIOS processing method, comprising:  
during execution of a system BIOS, determining whether a first video BIOS exists in an  
alterable firmware section of a memory system,  
if no video BIOS exist in the alterable section, executing a second video BIOS in a  
nonalterable firmware section in the memory system.

27. (Canceled).

28. (Original) The method of claim 26, further comprising, if a video BIOS exists in the  
alterable section, executing the video BIOS in the alterable section.

29. (Original) The method of claim 26, further comprising, determining whether a  
predetermined user command has been entered and, if no predetermined user command has  
been entered, executing a video BIOS from the alterable section.

30. (Original) The method of claim 26, further comprising:  
decompressing a video BIOS from the alterable section and  
executing the decompressed video BIOS.

31. (Original) A video BIOS processing method, comprising:  
determining whether a video BIOS package is present in an enhancement space of  
firmware,

if the video BIOS package is present, determining whether a predetermined user command has been entered,

if the predetermined user command has not been entered, executing the video BIOS package from the enhancement space,

otherwise, executing a video BIOS from a default space of firmware.

32. (Previously presented) The method of claim 31, further comprising:  
decompressing a video BIOS from the enhancement space and  
executing the decompressed video BIOS.

33. (Previously presented) A video BIOS processing method, comprising:  
during execution of a system BIOS, determining whether a video BIOS package is present in an enhancement space of firmware, the video BIOS package in the enhancement space including a BIOS update,

if the video BIOS package is present, determining whether a predetermined flag has been set in the firmware,

if the predetermined flag has been set, executing the video BIOS package from the enhancement space,

otherwise, executing a video BIOS from a default space of firmware.

34. (Previously presented) The method of claim 33, further comprising:  
decompressing a video BIOS from the enhancement space and  
executing the decompressed video BIOS.

35. (Previously presented) A video BIOS processing method, comprising:  
during execution of a system BIOS, determining whether a video BIOS package is present in an enhancement space of firmware, the video BIOS package in the enhancement space including a BIOS update,

if the video BIOS package is present in the enhancement space, decompressing the video BIOS package, and

executing the video BIOS package.

36. (Original) The video BIOS processing method of claim 35, further comprising searching memory for a decompressor for the video BIOS package and if the decompressor is not found executing a second video BIOS package from a default space of firmware.

37-42. (Canceled).